

**ENVIRONMENTAL ASSESSMENT**  
**For Routine Actions with Limited Environmental Impact**

Revised 11-00

Note: Instructions to DNRC staff for preparing this EA can be found at:  
[http://www.dnrc.state.mt.us/eis\\_ea.html](http://www.dnrc.state.mt.us/eis_ea.html)

Part I. Proposed Action Description

1. **Applicant/Contact name and address:** Dena Goodman & Jean Goodman  
6360 U.S. Highway  
Belt, MT 59412
2. **Type of action:** Provisional Permit to Appropriate Water  
Application #41Q-112246-00
3. **Water source name:** Belt Creek
4. **Location affected by action:** SE ¼ NE ¼ Section 11, T17N, R06E, Cascade County  
Approximately 8 miles south of Armington.
5. **Narrative summary of the proposed project, purpose, action to be taken, and benefits:**

The applicant proposes to irrigate approximately 2 acres of lawn and garden using a gasoline- powered pump delivering 150 GPM with a maximum water usage of 5 acre-feet. The proposed period of diversion is May 1 to September 30. The system will not be permanently installed and may be removed as necessary.

The DNRC shall issue a Provisional Beneficial Water Use Permit if the applicant proves that the criteria in 85-2-311 MCA are met.

6. **Agencies consulted during preparation of the Environmental Assessment:  
(include agencies with overlapping jurisdiction)**

State Historic Preservation Office  
MT Dept. of Fish, Wildlife & Parks  
Montana Natural Heritage Program Web-site  
Montana Rivers Information System Web-site

Part II. Environmental Review

1. **Environmental Impact Checklist:**

**PHYSICAL ENVIRONMENT**

Water quantity, quality and distribution

Water quantity: Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.

Determination: NO SIGNIFICANT IMPACT

Belt Creek has not been listed as a chronically or periodically dewatered stream by DFWP, although George Liknes, DFWP Fisheries Biologist expressed concern that late summer flows are not sufficient to support the fishery in all reaches of the stream. USGS gauging information supports this concern of inadequate late summer flows. This project could potentially worsen the dewatered late summer conditions, but the applicant intends to keep late summer diversions to a minimum and the permit could be so conditioned. The applicant stated that water would not be diverted when the water rights of others are not being satisfied. This includes the 90-CFS in-stream flow reservation of DFWP. DFWP and other senior water users would be entitled to make a call on the applicant to cease diversion at any time when their water rights are not being satisfied.

Water quality: Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.

Determination: NO SIGNIFICANT IMPACT

This reach of Belt Creek has been identified on the 2000 TMDL list as impaired. The probable causes of impairment are siltation, bank erosion, fish habitat degradation and metals. The metals determination concurs with that of George Liknes who cited elevated levels of lead in the islands and sandbars of stream as a possible concern. This project alone would not significantly impact the flushing flows in Belt Creek that may help naturally alleviate this problem. The TMDL list Belt Creek as partially supporting agricultural uses. This indicates that metal contamination levels in the water are not likely high enough to make the water unusable for lawn and garden irrigation.

Siltation and erosion will not be measurably impacted by this diversion because of its limited magnitude in terms of the source.

Fish habitat degradation will not occur as a result of this project unless DFWP would fail to make a call on the water when their in-stream flow reservation is not met or unless the applicant would not heed such a call.

The City of Belt has a surface water discharge permit into Belt Creek for a wastewater treatment plant approximately 11 miles downstream of the proposed diversion. The discharge permit allows for a mixing zone of 3400 ft. The proposed diversion will not unto itself impact the ability of the City of Belt to meet the conditions of their discharge permit.

Groundwater: Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.

Determination: NO IMPACT

This project will not impact groundwater quantity. Pertinent water quality issues have been addressed in the previous sections.

### **Diversion works**

Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.

Determination: NO SIGNIFICANT IMPACT

The gas powered diversion pump will likely be placed in the floodway. No floodplain permitting is required, as no official floodplain designation has been made in the area. The portable nature of the proposed system will make avoidance of flood problems possible. The pump, suction hose, foot valve, and supply line should not have an impact on the channel or riparian area, as no significant disturbance will occur. The possibility of leaking petroleum products exists, but such a leak would not be significant due to the limited fuel storage and small oil reservoir of the portable pump.

### **Unique, endangered, fragile or limited environmental resources**

Endangered and threatened species: Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any “species of special concern,” or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or “species of special concern.”

Determination: NO SIGNIFICANT IMPACT

A literature search of the Montana Natural Heritage program identified no plant species of concern in the area of the project. Photos submitted by the applicant also do not indicate any plant species of concern.

The Montana Natural Heritage Program identified the Northern Goshawk as being observed breeding in the area. The use of the gasoline-powered pump could create noise pollution that may interfere with the reproduction of the Goshawk. However this it is unlikely that this disturbance would be significantly different than the current level of disturbance due to the existing developments in the area.

The Montana Rivers Information System and Montana Natural Heritage Program web-sites used in conjunction revealed the Westslope Cutthroat Trout as being a species of concern present in Belt Creek. DFWP Biologist, George Liknes, indicated that no fish species of concern would be impacted by this development as long as reasonable measures are taken to ensure DFWP’s in-stream flow reservation is not adversely affected.

Given that the project is in close proximity to an existing farmstead, it is not likely that any new impacts will occur to endangered animal species, if any are present.

Wetlands: Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.

Determination: NO SIGNIFICANT IMPACT

Most likely the proposed point of diversion lies in an area that may be considered a functional wetland. The portable pump and supply line will cause minimal disturbance to the area. Therefore, no significant impact will occur.

Ponds: For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.

Determination: NO IMPACT

This project does not involve a pond nor will it impact any existing ponds.

### **Geology/Soil quality, stability and moisture**

Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.

Determination: NO SIGNIFICANT IMPACT

The Soil Survey of the Cascade County Area indicates the soil type at the point of diversion to be **Rivra gravelly sandy loam**. This soil type is typically found in the flood plain that is commonly flooded. Reasonable placement of a portable pump in this area should not create an impact to the soil in the area.

The irrigation would take place on **Straw loam**. This soil type is well suited for irrigation and crop growth. Irrigation of this soil type will not likely cause salinity problems. While moisture content will be increase in the irrigated areas, vegetation will use the excess soil moisture. Soil quality will not be impacted with proper use of fertilizers and pesticides on the lawn and garden areas.

### **Vegetation cover, quantity and quality/Noxious weeds**

Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.

Determination: NO SIGNIFICANT IMPACT

Photographs submitted by the applicant of the proposed diversion area show a healthy riparian area dominated by native wheatgrasses, willows and cottonwoods. No noxious weeds are visible.

The lawn and garden area will be presumably free of noxious weeds and be populated with appropriate grasses and plants. The lawn area is already in place and the garden area will be developed in an area currently supporting grasses.

### **Air quality**

Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.

Determination: NO SIGNIFICANT IMPACT

The gasoline-powered pump will add to air pollution, but this added pollution will not be significant.

### **Historical and archeological sites**

Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project.

Determination: NO SIGNIFICANT IMPACT

A literature search by the State Historic Preservation Office found no recorded cultural properties in the area. Any new ground disturbance will occur in the area of a currently occupied home. It is unlikely any undisturbed cultural resources are present.

**Demands on environmental resources of land, water, and energy**

Assess any other impacts on environmental resources of land, water and energy not already addressed.

Determination: NO SIGNIFICANT IMPACT

No potentially significant impacts to environmental resources of land, water, and energy have been identified that have not already been addressed.

**HUMAN ENVIRONMENT**

**Locally adopted environmental plans and goals**

Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.

Determination: NO IMPACT

No locally adopted environmental plans and goals have been identified.

**Access to and quality of recreational and wilderness activities**

Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.

Determination: NO SIGNIFICANT IMPACT

The pump will be located in the immediate area of the stream. It may be aesthetically offensive to sportsman and may cause considerable localized noise pollution. This impact will be localized and will not significantly impact the overall recreational opportunities on Belt Creek.

**Human health**

Assess whether the proposed project impacts on human health.

Determination: NO SIGNIFICANT IMPACT

The project will introduce noise pollution in the very localized area. However, the project is located well within the applicants' property boundaries and is a reasonable distance from any dwellings. Therefore, the noise pollution will cause no significant impact to human health. No other potential impacts on human health are apparent.

**Private property**

Assess whether there are any government regulatory impacts on private property rights.

Yes\_\_ No X. If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights

Determination: NO IMPACT

No government regulatory impacts on private property right have been identified.

## **Other human environmental issues**

For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.

Impacts on:

- (a) Cultural uniqueness and diversity ? NO IMPACT
- (b) Local and state tax base and tax revenues ? NO IMPACT
- (c) Existing land uses ? NO IMPACT
- (d) Quantity and distribution of employment ? NO IMPACT
- (e) Distribution and density of population and housing ? NO IMPACT
- (f) Demands for government services ? NO IMPACT
- (g) Industrial and commercial activity ? NO IMPACT
- (h) Utilities ? NO IMPACT
- (i) Transportation ? NO IMPACT
- (j) Safety ? NO IMPACT
- (k) Other appropriate social and economic circumstances ? NONE

### **2. Secondary and cumulative impacts on the physical environment and human population:**

Continued development of the water resource on Belt Creek could worsen the conditions on the stream. Reduction of flows due to the cumulative impact of new development not only may negatively impact the fishery it may also worsen the water quality due to decreased flushing flows that would help naturally alleviate some of the water quality problems. Also, reduction of flows may interfere with the ability of the City of Belt to stay within the parameters of its discharge permit.

The project has many limited impacts that individually are not significant but may be significant if many similar projects are permitted. Development of this nature on Belt Creek has been relatively limited. In the past 15 years only 7 new water rights, all relatively small projects, have been issued on Belt Creek. This pace of development could continue for some time without significant cumulative impacts to the physical environment and human population. However, if the rate of development of the water resource were to increase substantially, the cumulative impacts may become significant.

### **3. Describe any mitigation/stipulation measures:**

The applicant agrees that water should not be diverted when the water rights of other water users would be adversely affected as a result of said diversion. The permit could be conditioned to keep late summer diversions to a minimum, thus reducing the probability of adverse affecting the water rights of others. The water right permitting process will address how this will be accomplished.

**4. Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:**

**ALTERNATIVE #1 - NO ACTION**

The conditions on Belt Creek would remain unchanged. The applicant may be exposed to fire danger, as a defensible area around the dwelling may not be achievable without adequate water for the landscaping. The applicant would not reap the benefits of the produce grown in the garden area.

**ALTERNATIVE #2 – IRRIGATION WITH EXISTING GROUNDWATER SUPPLY**

The applicant could use the existing domestic water supply to water the lawn and garden. This could threaten the domestic supply during drought conditions by overtaxing the well. Also, groundwater may contain constituents that are not conducive to produce production or irrigation of lawns. This alternative has not been fully explored.

**PART III. Conclusion**

Based on the significance criteria evaluated in this EA, is an EIS required? NO

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action:

No significant impacts have been identified. Therefore, the EA is an appropriate level of analysis for this action.

Name of person(s) responsible for preparation of EA:

Name: Andy Brummond

Title: Water Resources Specialist

Date: 11/28/00